

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 G11B20/00 G11B20/10

0/10 G11B7/00

H03M13/41

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC 7-611B-H03M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

		Relevant to claim No.
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Helevani to danii No.
Χ	EP 0 590 851 A (PIONEER ELECTRONIC CORP) 6 April 1994 (1994-04-06)	1-8, 10-19
Υ	abstract column 3, line 48 - column 7, line 52 figures 3,5-7	9
Υ	WEEKS W: "Full-Surface Data Storage" THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN ELECTRICAL ENGINEERING IN THE GRADUATE COLLEGE OF THE UNIVERSITY OF ILLINOIS AT URBANA- CHAMPAIGN, XX, XX, 2000, page complete, XP002227664 page 1, line 1 - page 11 page 18, paragraphs 2,3 figure 2.2	9

X Further documents are listed in the continuation of box C.	Patent family members are listed in annex.		
<ul> <li>Special categories of cited documents:</li> <li>"A" document defining the general state of the art which is not considered to be of particular relevance</li> <li>"E" earlier document but published on or after the International filing date</li> <li>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</li> <li>"O" document referring to an oral disclosure, use, exhibition or other means</li> <li>"P" document published prior to the international filing date but later than the priority date claimed</li> </ul>	<ul> <li>*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention.</li> <li>*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone.</li> <li>*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</li> <li>*&amp;* document member of the same patent family</li> </ul>		
Date of the actual completion of the international search  11 May 2004	Date of mailing of the international search report  19/05/2004		
Name and mailing address of the ISA  European Patent Office, P.B. 5818 Patentlaan 2  NL – 2280 HV Rijswijk  Tel. (+31–70) 340–2040, Tx. 31 651 epo nl,  Fax: (+31–70) 340–3016	Authorized officer  Valencia, E		





		. 1B 03/05309
C.(Continu	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	BERGMANS J W M: "Digital Baseband Transmission and Recording, VITERBI DETECTION" DIGITAL BASEBAND TRANSMISSION AND RECORDING, BOSTON, MA: KLUWER ACADEMIC PUBL, US, 1996, pages 301-368,370, XP002238821 ISBN: 0-7923-9775-4 cited in the application the whole document	1-19

## INTERNATIONAL SEARCH REPORT

ermation on patent family members



Patent document cited in search report	Publication date		Patent family member(s)	Publication date
EP 0590851 A	06-04-1994	JP DE DE EP US	6111344 A 69317844 D1 69317844 T2 0590851 A1 5610883 A	22-04-1994 14-05-1998 17-09-1998 06-04-1994 11-03-1997